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Annex to Report:
Work-related musculoskeletal disorders –
Facts and figures

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Summary

- Repetitive strain injuries (RSI) were reported by 28% of the Dutch working population in 2004. Since 1997 RSI has slightly increased. Absence due to RSI remained stable between 1997 and 2002, at about 3%.
- Complaints to upper extremities due to physical workload reported by Dutch working population increased from 41% in 1997 to 44% in 2002, while complaints to the upper extremities due to vibrations were reported by 17% of the workers in 1997 and 18% in 2002.
- Regarding the type of complaints that caused their last absence period 10.7% of the employees reported back complaints, 6.0% complaints to upper extremities and 4.3% complaints to lower extremities.
- In 2004, 21% of the new work disabled had a musculoskeletal disorder.
- Even though over the years (2000, 2002 and 2004) RSI is somewhat more frequent in the two highest age categories (46-55 years and 56-64 years), the youngest age category (20-25 years) has witnessed an increase in the prevalence of RSI from 18% in 2000 to 26% in 2002 and 2004. Among other age categories these percentages remain more or less the same between 2000 and 2004.
- Women report RSI more often than men in The Netherlands.
- According to the Fourth European Survey on Working Conditions (ESWC) carried out by the European Foundation for the Improvement of Living and Working Conditions, 13.8% of Dutch workers suffered from backache and 15.6% from muscular pain in 2005. The prevalence generally increases with age until the 40-54 group and men appear to be slightly more affected than women.
- By sector, workers in construction, agriculture, transport and education and health reported the highest shares of MSDs, while in terms of occupation, craft and related trades workers and plant and machine operators and assemblers seemed to be the most affected.

Source description

Statistical sources

Title	Permanent Quality of Life Survey (Permanent Onderzoek Leefsituatie)
Acronym	POLS
Institution	Central Bureau of Statistics (CBS)
Country	The Netherlands
Periodicity	<p>Every third year during 1977–1989; Annual since 1989; trend break in 1994;</p> <p>Continuous data collection (whole year) since 1997. Questions on working conditions no longer included since 2003.</p>
Type	<p>Household survey;</p> <p>Method: The POLS is a face-to-face interview. However, the questions on health are presented on paper, and the interviewees are asked to send them back after completion. This may result in additional non-response for these questions.</p>
URL	<p>http://statline.cbs.nl Or a data file to be bought from the CBS which enables secondary analyses.</p>
Demographic group	<p>This survey consists of a core interview that is administered to – depending on the year – between 40,000 and 90,000 people who have a registered address in the Netherlands. Some of the respondents also receive work and health questions, submitted to approximately 18,500 workers with a response of approximately 10,000 people each year (about 60% response rate on average). Workers aged 18–64 years number about 4,500, a representative sample of the Dutch workforce.</p>
Objectives	<p>Continually gathering high quality and coherent data regarding the living conditions of the Dutch population.</p>
Content	<p>The POLS provides information on living conditions. It also provides information regarding health, the use of medical services, lifestyle, participation in national preventive health programs of the Dutch population. For workers the questions regarding health are supplemented with questions regarding quality of work to get a clear picture of the experienced working conditions.</p>
Question	<ul style="list-style-type: none"> ▪ Back complaints (chronic and non-chronic); ▪ RSI (complaints to neck, shoulder, arm or hand caused by workload, in the past 12 months; until 2000); ▪ Sickness absence due to RSI in the past year; ▪ Physical workload in some form or other (% regularly/sometimes); ▪ Complaints to the upper extremities due to physical workload (% regularly/sometimes, in the past 12 months). ▪ Sickness absence due to these complaints (% yes, in the past 12 months);

Title	Permanent Quality of Life Survey (Permanent Onderzoek Leefsituatie)
	<ul style="list-style-type: none"> ▪ Consulted GP regarding these complaints (% yes); ▪ Consulted a specialist regarding these complaints (% yes); ▪ Went to hospital as a result of these complaints (% yes); ▪ Exposure to vibrations from vehicles or equipment in some form or another (% regularly/sometimes); ▪ Complaints to the upper extremities due to these hand, arm, and body vibrations (% regularly/sometimes, in the past 12 months); ▪ Sickness absence due to these complaints (% yes, in the past 12 months); ▪ Consulted GP regarding these complaints (% yes); ▪ Consulted a specialist regarding these complaints (% yes); ▪ Went to hospital as a result of these complaints (% yes).

Title	Netherlands Working Conditions Survey (Nationale Enquete Arbeidsomstandigheden)
Acronym	NEA
Institution	TNO Work and Employment (in cooperation with the Ministry of Social Affairs and Employment, and since 2005 with Statistics Netherlands (CBS)).
Country	The Netherlands
Periodicity	The survey started in 2003 and was originally scheduled for every second year, but will probably become an annual survey since 2005.
Type	Employee Survey. Method: PAPI (postal questionnaire); respondents have the option to use CAWI (web interviewing) instead of PAPI.
Demographic group	Representative sample of the Dutch work force (15–64 years), excluding self-employed. The net response was about 10,000 employees in 2003 and about 23,000 employees in 2005.
Objectives	<p>Objective is to get a picture of the working conditions of a large representative sample of employees. The Ministry of Social Affairs and Employment uses the data to monitor the working conditions in the Netherlands.</p> <p>In addition, the data are used to carry out sector or profession-oriented benchmarking studies, and to analyze special topics in the field of work, working conditions, work relations, personnel management, work and health, etc.</p> <p>It is the intention to yearly alternate a more restricted 'working conditions survey' (2005 and 2006, 2008 etc) with a more elaborate 'quality of work and employment survey' (2007, 2009 etc).</p>

Title	Netherlands Working Conditions Survey (Nationale Enquete Arbeidsomstandigheden)
Content	The NEA provides information regarding several aspects of the working situation of employees, such as profession, sector, working times, and various occupational risks. It also provides information on measures taken by employers to improve the health and safety of their employees, and information on the (work-related) health and wellbeing of employees.
Question	<p>What type of complaints caused your last leave of absence?</p> <ul style="list-style-type: none"> • back complaints; • complaints of the neck, shoulders, arms, wrists, hands; • complaints of the hip, legs, knees, feet?;.(etcetera). <p>Do you have the impression that these complaints were related to the work you performed?</p> <ul style="list-style-type: none"> • yes, predominantly caused by my work; • yes, partly caused by my work; • no, not caused by my work; • don't know.

Title	TNO Working Conditions Survey
Acronym	TAS
Institution	TNO Work and Employment (in cooperation with the Ministry of Social Affairs and Employment)
Country	The Netherlands
Periodicity	It is intended to be administered every second year, and has delivered information in 2000, 2002 and 2004. The 2006 survey, however, is replaced by NEA 2006.
Type	It consists of a postal/web survey and has a net response of approximately 4,000 employees. Every employee in the sample receives a questionnaire by regular mail with a login code for the web survey, and decides for themselves whether to fill out the postal questionnaire or the web questionnaire. Part of the 2002 sample agreed to participate in a follow-up in 2004.
Demographic group	Representative sample of the Dutch labour force (15–64 years)
Content	This survey mainly focuses on quality of work and employment as well as on labour market related topics, and measures most concepts with scales (with several questions measuring the same concept) instead of using only one or two questions per concept.
Question	<p>'In the past 12 months, have you had regular (multiple times, but of short duration each time) or long lasting (one or more times) inconvenience (pain, discomfort) in your:</p> <ol style="list-style-type: none"> 1) neck 2) shoulders

Title	TNO Working Conditions Survey
	<p>3) arms/elbows 4) wrists/hands</p> <p>(possible answers: 'no, never', 'a single time, but of short duration', 'a single time, of long duration', 'multiple times, but of short duration each time')</p> <p>Were these complaints partly or totally caused by work?</p> <p>(possible answers: 'not applicable, had no complaints', 'had complaints but they were not caused by work', 'had complaints that were totally or partly caused by work')</p>

Title	European Survey on Working Conditions
Acronym	ESWC
Institution	European Foundation for the Improvement of Working and Living Conditions (Dublin)
Country	EU
Periodicity	Every 4 years: 1991-1996-2000-2005
Type	Employee Survey
URL	http://www.eurofound.eu.int/working/surveys/index.htm
Demographic group	Employees, self-employed without personnel and self-employed with less than 10 employees
Objectives	<p>Monitoring of trends in working conditions for employees and the self-employed throughout the European Union.</p> <p>This Survey provides an opportunity to monitor working conditions in the EU and to analyze specific themes in depth, such as: sector differences, working conditions and gender, age, or employment contracts, work organization, working hours, etc.</p>
Description	Face-to face interviews in all EU countries, with approx. 1,000 people in each country are selected (random walk), structured questionnaire
Content	This survey describes a broad range of questions in the field of working conditions.
Question	<p>Q.33. Does your work affect your health, or not? (yes, no)</p> <p>Q.33a. How does it affect your health?</p> <p>Q33a_d Backache (mentioned, not mentioned)</p> <p>Q33a_g Muscular pains -in shoulders, neck and/or upper/lower limbs (mentioned, not mentioned)</p>

Analytical sources

Title	Alert Report Occupational Diseases 2005
Editor	Netherlands Center for Occupational Diseases (Nederlands Centrum voor Beroepsziekten; NCvB)
Country	The Netherlands
Time	2005
URL	http://www.arbo.nl/statistics/beroepsziekten.stm
Description	<p>The Alert Report aims to provide an overview of the incidence of occupational diseases and the distribution within particular sectors and specific professions. Wherever possible, the report also shows the socio-demographic features relating to the distribution of occupational diseases, as well as details of various trends.</p> <p>Another function of the Alert Report is to issue warnings. The report alerts policy-makers and professionals in the area of Health & Safety to signals considered to be important by the NCvB, so that they can take the necessary measures. These signals may relate to the emergence of new diseases, for example, or to new risks or problem areas concerning the available healthcare for occupational diseases.</p>
TOC	<p>The total number of occupational diseases reported in the Netherlands last year is virtually unchanged. Some occupational diseases occur less frequently. There has been a reduction in the number of musculoskeletal disorders, which could be due to reduced physical exertion at work.</p> <p>The number of RSI cases reported since 2000 has almost halved. The exact reason for this is not yet clear.</p> <p>When dealing with back problems, modifying the work station appears to provide a more effective solution than the usual medical intervention. This can also result in substantial savings for companies.</p>

1. General prevalence

Almost a quarter of the Dutch working population reported RSI in 2000. According to the Netherlands Center for Occupational Diseases most registered occupational diseases are MSDs.

About a quarter (23%) of the Dutch working population, aged 15 to 65, reported RSI in 2000. RSI increased between 1997 and 2000 from 19% to 23%. Absence due to RSI was about 3% in 2000 and remained stable between 1997 and 2000 (see table below).

Since 2001 data on RSI are no longer available in the CBS data. However, TAS data show that RSI slightly increased among the Dutch working population from 26% in 2000 to 28% in 2002, and remained stable between 2002 and 2004 (Heinrich et al., 2006).

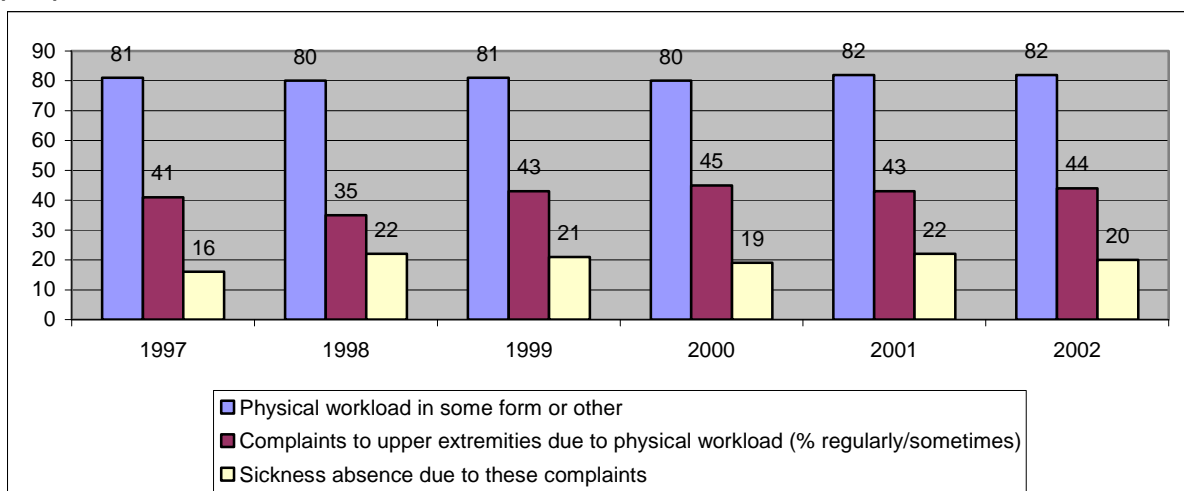
Table 1: RSI in the Dutch working population between 1997 and 2000

	1997	1998	1999	2000
RSI (% complaints to neck, shoulder, arm or hand caused by workload, in the past 12 months)	19	16	21	23
Sickness absence (%) due to RSI in the past year	3	3	4	3

Source: CBS, Statline 2006

Physical workload can lead to complaints of the upper extremities/limbs. The percentage of workers reporting complaints of the upper extremities due to physical workload increased from 41% in 1997 to 44% in 2002. Furthermore, 37% visited the general practitioner regarding these complaints. The percentage of workers reported absent due to these complaints increased from 16% in 1997 to 20% in 2002.

Figure 1: Complaints and sickness absence due to physical workload between 1997 and 2002 (in%)



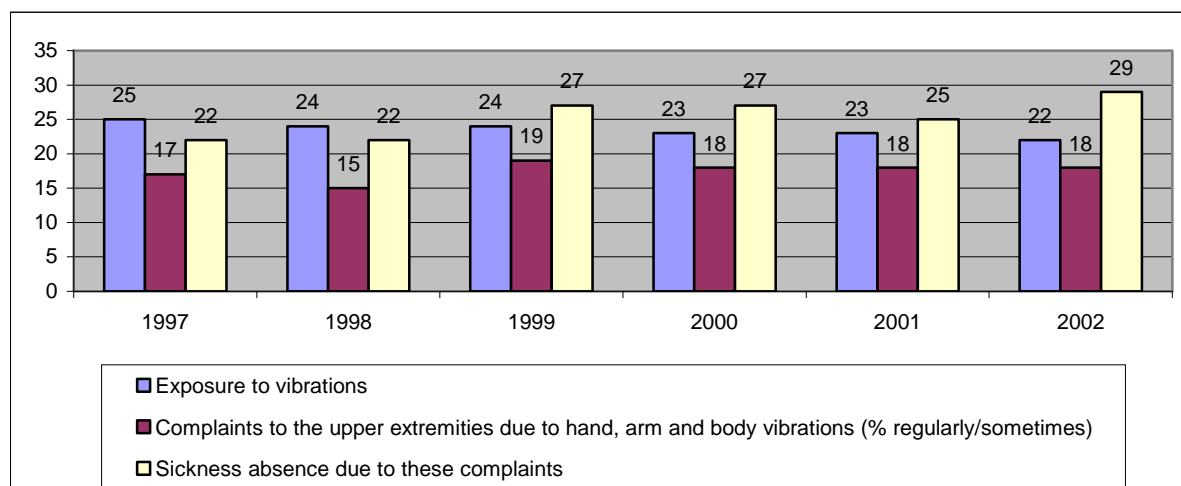
Source: CBS, Statline 2006

Table 2: Visits to GP, specialist or hospital due to physical workload between 1997 and 2002.

	1997	1998	1999	2000	2001	2002
Consulted GP regarding these complaints (% yes)	31	40	38	36	37	37
Consulted a specialist regarding these complaints (% yes)	9	12	12	10	11	10
Went to hospital as a result of these complaints (% yes)	1	1	2	1	1	1

Source: CBS, Statline 2006

Exposure to vibrations (from vehicles or equipment) at work can also lead to complaints of the upper extremities/limbs, which were reported by 17% of the workers in 1997. In 2002 this percentage is comparable, namely 18%. Sickness absence due to these complaints increased from 22% in 1997 to 29% in 2002.

Figure 2: Complaints and sickness absence due to vibrations from vehicles or equipment between 1997 and 2002 (in %).

Source: CBS, Statline 2006

Table 3: Visits to GP, specialist or hospital due to vibrations from vehicles or equipment between 1997 and 2002.

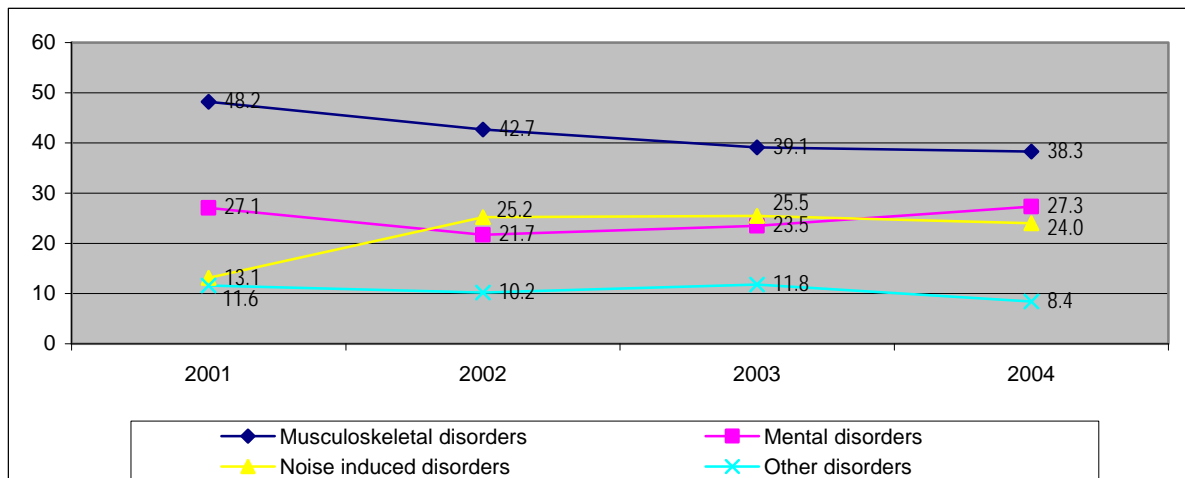
	1997	1998	1999	2000	2001	2002
Consulted GP regarding these complaints (% yes)	31	38	41	35	34	38
Consulted a specialist regarding these complaints (% yes)	10	14	19	12	12	11
Went to hospital as a result of these complaints (% yes)	1	0	4	2	1	2

Source: CBS, Statline 2006

Regarding the type of complaint that caused their last absence period, 10.7% of the employees reported back complaints. Complaints to neck, shoulders, arms and wrists were mentioned by 6% of the employees as the main reason for their last absence period. Furthermore, 4.3% mentioned complaints to hip, legs, knees and feet. On whether employees have the impression that these complaints were related to their work, 10.4% mentioned 'yes, predominantly caused by work' and 14.7% mentioned 'yes partly caused by work' (NEA, 2005).

According to the Netherlands Center for Occupational Diseases (Nederlands Centrum voor Beroepsziekten; NCvB) most registered occupational diseases are musculoskeletal disorders (MSDs). In 2004 about 40% of the occupational diseases were MSDs (see figure below). Furthermore, when looking at the diagnosis of employees who become work disabled it is found out that in 2005 12.4% of the new work disabled in the Netherlands had a MSD.

Figure 3: Percentage distribution of occupational diseases by diagnosis, 2001-2004



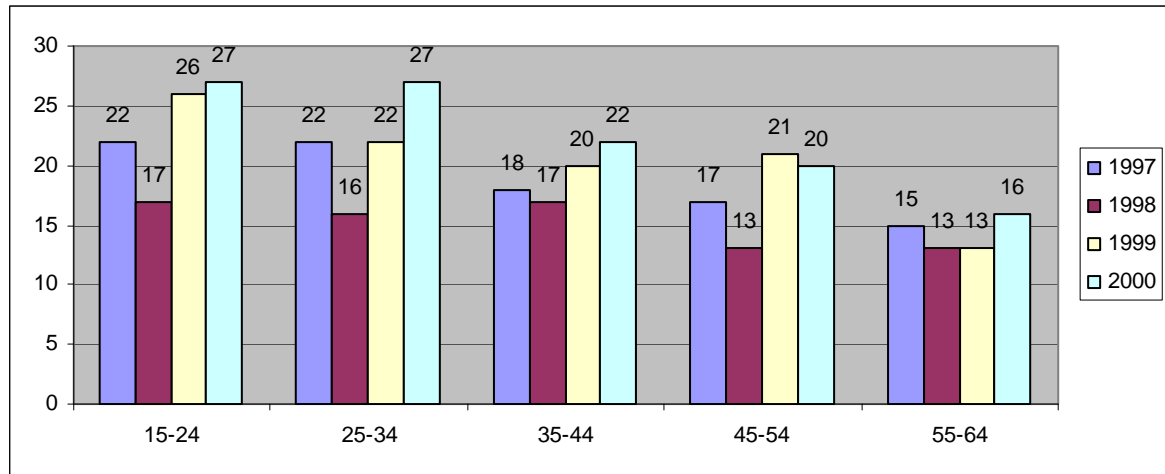
Source: Netherlands Center for Occupational Diseases (Nederlands Centrum voor Beroepsziekten; NCvB)

Data from the Fourth European Survey on Working Conditions (ESWC) show that in 2005 13.8% of Dutch workers reported suffering from backache while 15.6% of them complained of muscular pains.

2. By age

According to CBS data, workers in the lower age categories more often report RSI complaints than those in the higher age categories. In 2000, 27% of the workers in the lowest age category (15-24 years) reported RSI complaints, while in the highest age category (55-64 years) this percentage was 16%. Between 1997 and 2000 RSI complaints seem to have increased slightly, except for the highest age category.

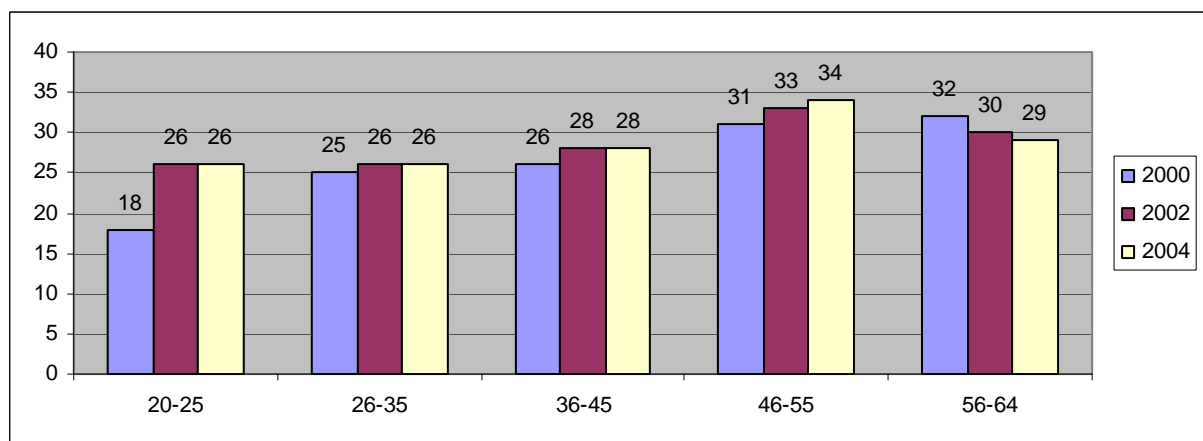
Figure 4: RSI: Percentage complaints to neck, shoulder, arm or hand caused by workload, in the past 12 months, by age, 1997-2000



Source: CBS, Statline 2006

Since 2001 data on RSI are no longer available in the CBS. However, TAS data show that over the years (2000, 2002 and 2004) RSI is somewhat more frequent in the two highest age categories (46-55 years and 56-64 years) compared to the lower age categories, which is in contrast with the CBS data. Furthermore, in the youngest age category (20-25 years) the prevalence of RSI increased from 18% in 2000 to 26% in 2002 and 2004. Among other age categories these percentages remain more or less the same between 2000 and 2004 (Heinrich et al, 2006).

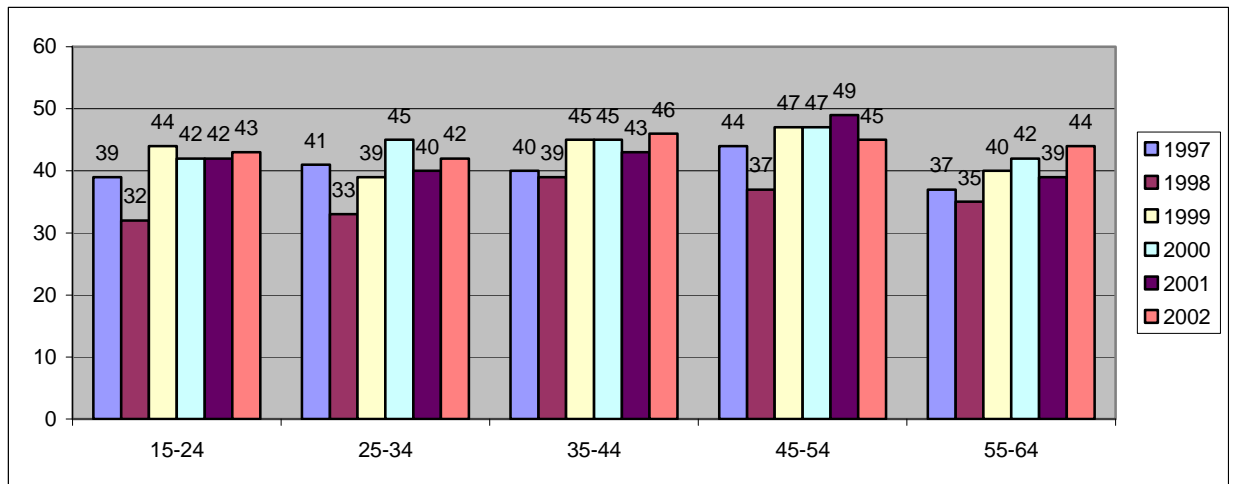
Figure 5: RSI: Percentage reporting regular or long-lasting pain/discomfort to neck, shoulders, arms/elbows, or wrists/hands in the past 12 months, which are fully or partly the result of work, by age, 2000, 2002 and 2004



Source: Heinrich et al., 2006

There are no substantial differences between the different age groups regarding complaints to upper extremities due to physical workload, and there are no clear trends between 1997 and 2002 (see figure below).

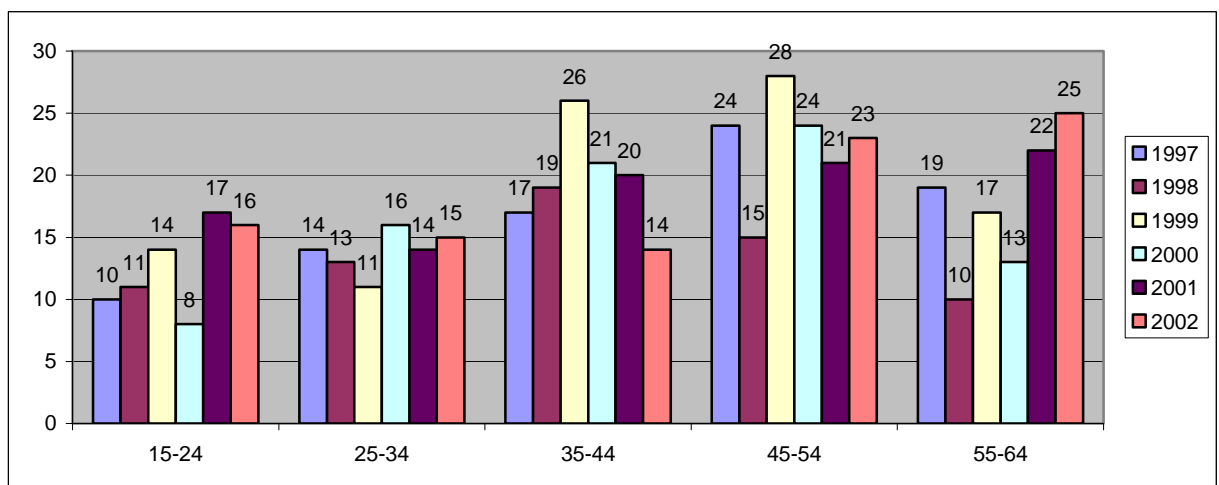
Figure 6: Complaints to the upper extremities due to physical workload (% regularly / sometimes, in the past 12 months), by age, 1997-2002



Source: CBS, Statline 2006

Overall, workers in the lower age categories less often report complaints to the upper extremities due to vibrations from vehicles or equipment compared to workers in the higher age categories (see figure below).

Figure 7: Complaints to the upper extremities due to hand, arm, and body vibrations from vehicles or equipment (% regularly/sometimes, in the past 12 months), by age, 1997-2002

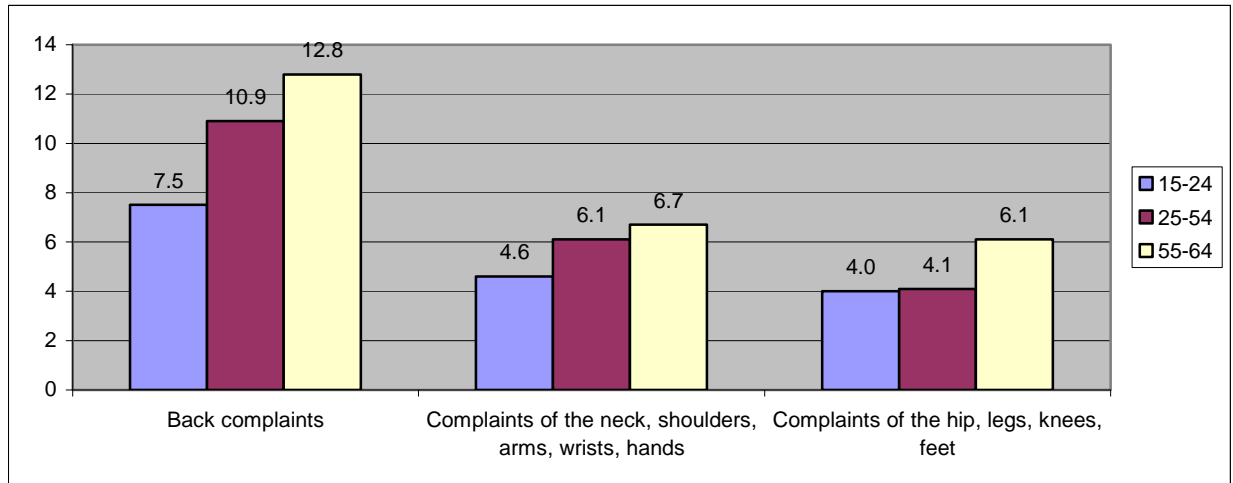


Source: CBS, Statline 2006

Older employees more often report complaints to back, upper extremities and lower extremities as the type of complaints that caused their last leave of absence, compared to younger employees. In addition, older employees more often report that their last absence period was mainly or partly caused by their work. As opposed to a share of 20.6% of workers aged 15 to 24 years old mentioning

that the complaints that caused their last leave of absence were mainly or partly work related, this figure goes up to 25.3% among those aged 25 to 54 years old and to 28.1% for those in the age category 55-64 (NEA, 2005).

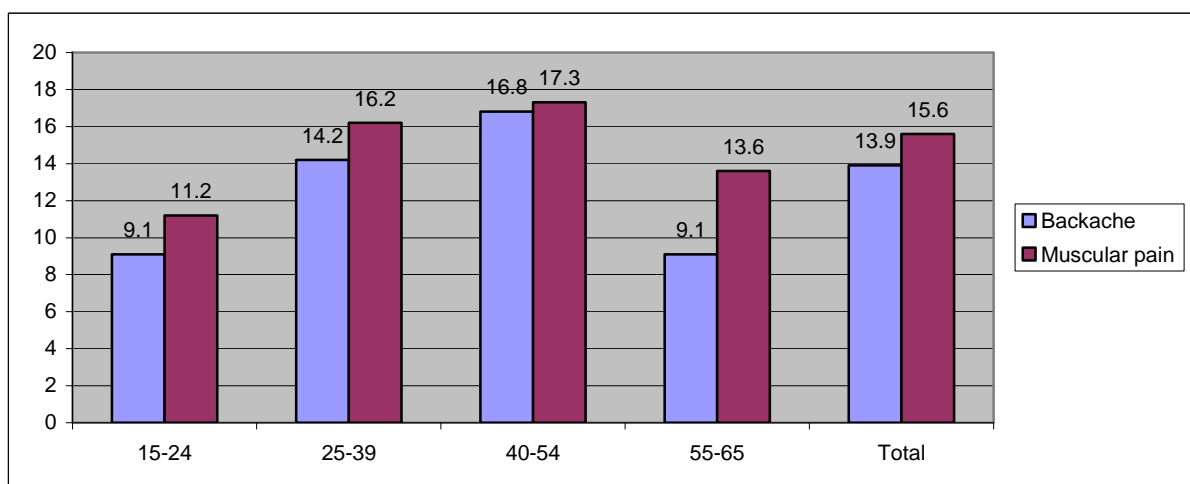
Figure 8: Type of complaints -mentioned by employees- that caused last leave of absence in 2005, by age



Source: NEA 2005

According to the ESWC, all age groups in The Netherlands report a higher share of muscular pain than backache. The highest prevalence is found among those in the 40-54 age bracket, with a 16.8% share of backache and 17.3% of muscular pain. These shares are slightly lower for those aged 25 to 39 years old, while the youngest (15-24) and oldest workers (55-65) report the same prevalence of backache.

Figure 9: Percentage share of workers reporting MSDs: backache and muscular pain, by age, 2005



European Survey on Working Conditions, 2005

3. By gender

Women report more RSI and disorders of upper extremities than men

Between 1997 and 2000 women report somewhat more RSI than men, except for 1998 where the percentages for men and women are the same. For both genders, RSI seems to decrease between 1997 and 1998 and increase again between 1998 and 2000 (see table 4). Since 2001 data on RSI are no longer available in the CBS data. However, TAS data show that women report RSI more often than men. In addition, RSI among women has gone up in 2002 and 2004: 33.2% and 32.9%, respectively, with respect to 2000. For men this percentage is more or less the same in 2000, 2002, and 2004: 22.6%, 24.1% and 24.2%, respectively (Heinrich et al., 2006).

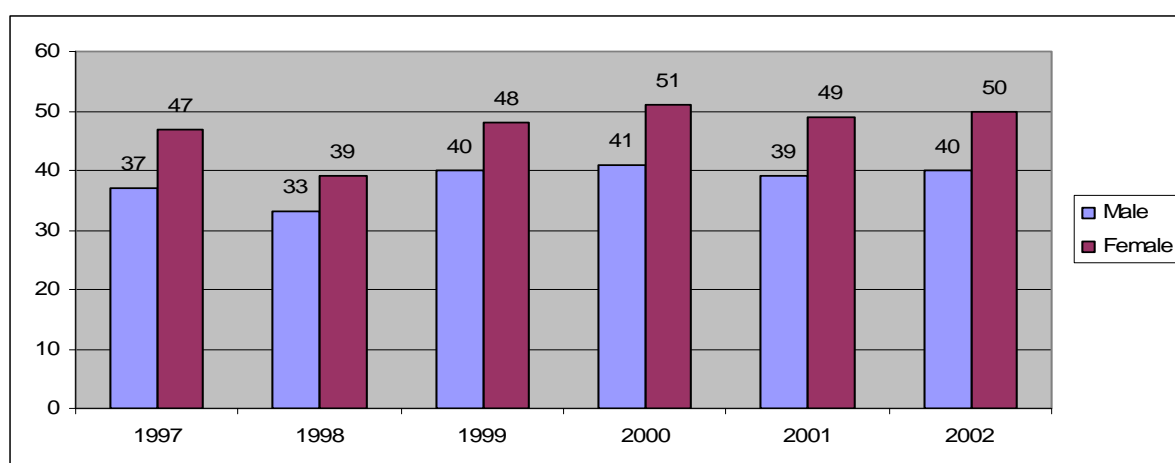
Table 4: RSI in the Dutch working population by gender, 1997-2000

RSI (% complaints to neck, shoulder, arm or hand caused by workload, in the past 12 months)	1997	1998	1999	2000
Men	18	16	20	22
Women	20	16	23	25

Source: CBS, Statline 2006

Overall, women are more likely to report complaints to the upper extremities due to physical workload than men. Both genders show a similar evolution in time, the prevalence remaining more or less stable between 1999 and 2002. In 2002, 50% of women reported complaints to the upper extremities due to physical workload while the share was 40% among their male counterparts.

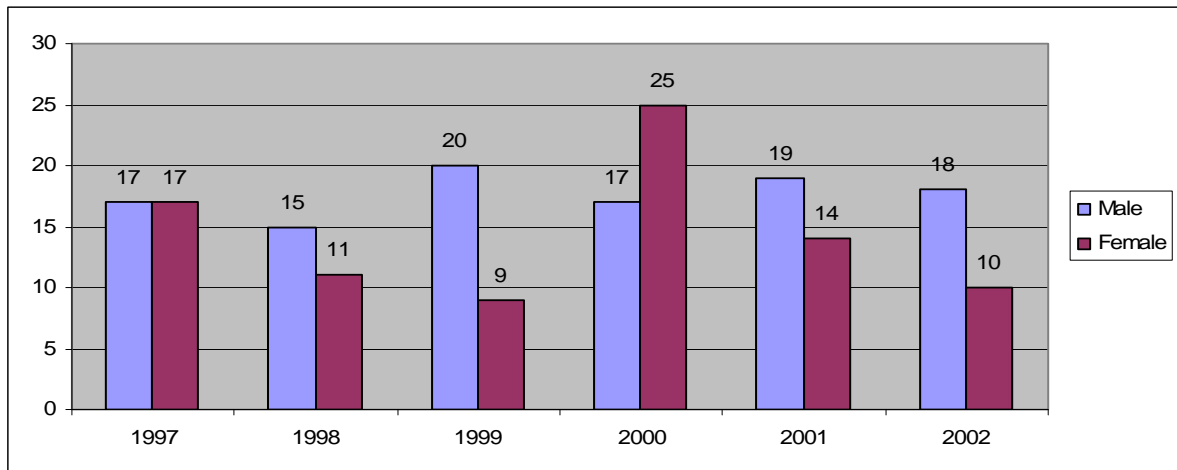
Figure 10: Percentage share of complaints to upper extremities (regularly/sometimes) due to physical workload, by gender, 1997-2002.



Source: CBS, Statline 2006

In general, men seem to report somewhat more complaints to the upper extremities due to hand, arm and body vibrations from vehicles or equipment (except for 1997 and 2000). For both men and women figures fluctuate between 1997 and 2002, but do not show a clear decrease or increase.

Figure 11: Percentage share of complaints to upper extremities (regularly/sometimes) due to vibrations from vehicles or equipment, by gender, 1997-2002.

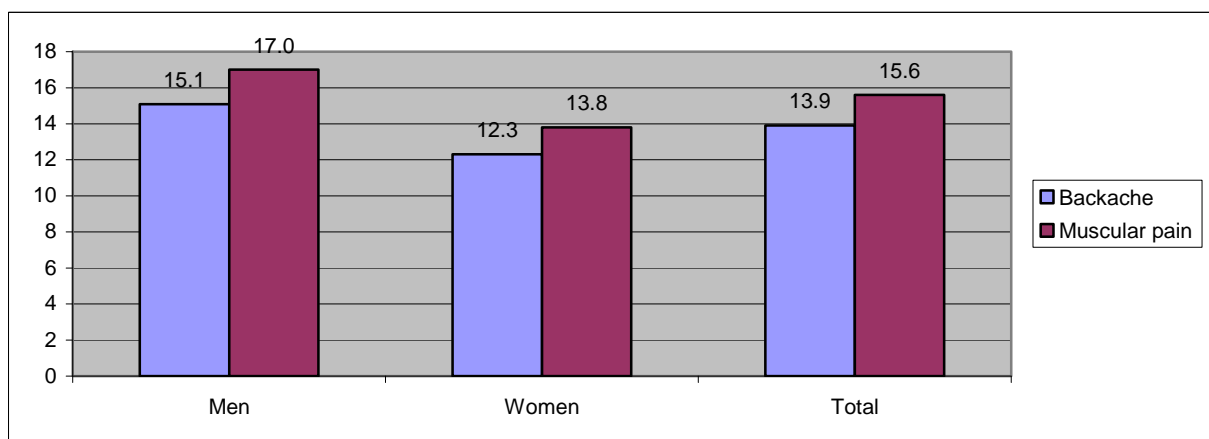


Source: CBS, Statline 2006

Male employees more often report back complaints (13.0%) and complaints to hip, legs, knees and feet (5.2%) as the main causes of their last leave of absence, compared to female employees: 8.0% and 3.3%, respectively. On the other hand, female employees more often report complaints of the neck, shoulders, arms, wrists and hands as the main cause of their last leave of absence: 6.7%, compared to 5.4% among men (NEA, 2005).

Finally, the ESWC reveals a slightly greater prevalence of MSDs among Dutch men than women. As shown in the graph, 17% of men complain of muscular pain while the share goes down to 13.8% among women. The prevalence of backache is slightly lower, reporting a 15.1% share among men and 12.3% among women.

Figure 12: Percentage share of workers reporting MSDs: backache and muscular pain, by gender, 2005



European Survey on Working Conditions, 2005

4. By sector

Sector groups (sections in NACE Rev 1.1) used in figures:

- A: Agriculture, hunting, forestry;
- B: Fishing;
- C: Mining;
- D: Manufacturing;
- E: Electricity, gas and water;
- F: Construction;
- G: Whole sale and retail, repairs;
- H: Hotels and restaurants;
- I: Transport and communication;
- J: Financial intermediation;
- K: Real estate, business activity;
- L: Public administration and defence;
- M: Education;
- N: Health and social work;
- O: Other community, social and personal service activities;
- P: Activities of households;
- Q: Extra-territorial organizations and bodies.

Most sectors have witnessed an increase in RSI

Data on RSI broken down by sector between 1997 and 2000 reveals relatively high percentages of RSI among workers in agriculture (A) and construction (F), while education (M), public administration (L) and financial institutions (J) report lower percentages of RSI (see table 5). In most sectors there has been an increase in RSI between 1998 and 2000.

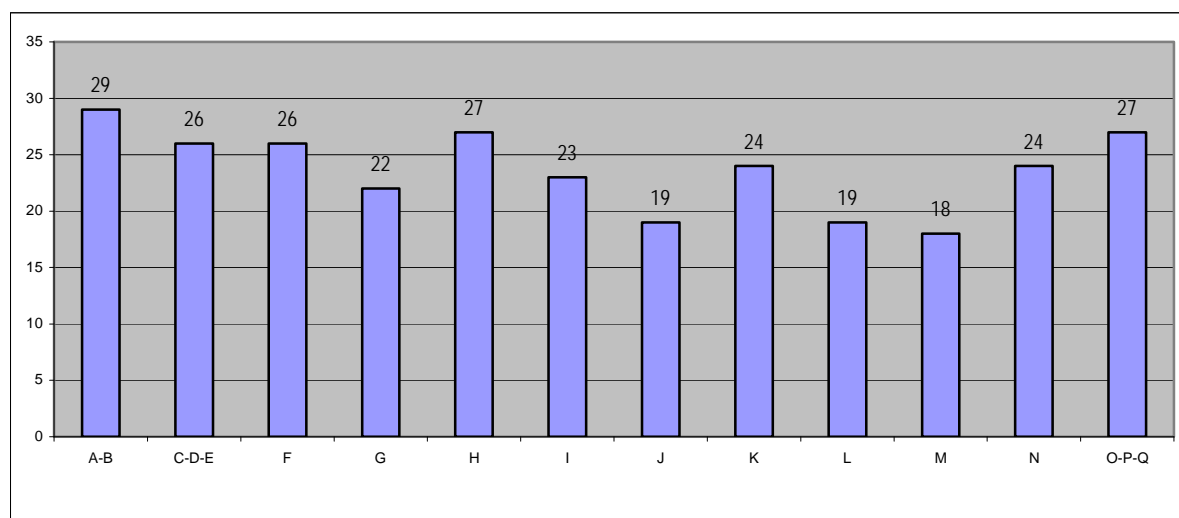
Table 5: RSI in the Dutch working population between 1997 and 2000 by sector

RSI (% complaints to neck, shoulder, arm or hand caused by workload, in the past 12 months)	1997	1998	1999	2000
A-B	35	19	28	29
C-D-E	20	18	22	26
F	24	21	25	26
G	18	16	24	22
H	22	14	20	27
I	24	16	28	23

RSI (% complaints to neck, shoulder, arm or hand caused by workload, in the past 12 months)	1997	1998	1999	2000
J	15	13	21	19
K	19	17	21	24
L	15	12	20	19
M	11	12	16	18
N	17	15	18	24
O-P-Q	24	17	24	27

Source: CBS, Statline 2006

Figure 13: RSI: percentage complaints to neck, shoulder, arm or hand caused by workload (regularly/sometimes), in the past 12 months, by sector, 2000



Source: CBS, Statline 2006

Overall, complaints to the upper extremities due to physical workload between 1997 and 2002 are most frequently reported by workers in environment, culture, recreation and other services (O-P-Q), health and welfare (N) and construction (F). They are less frequently reported in public administration (L) and financial institutions (J) (see table 6). Between 1997 and 2002 the percentage shares have fluctuated among all sectors, but there are no clear trends (increases or decreases).

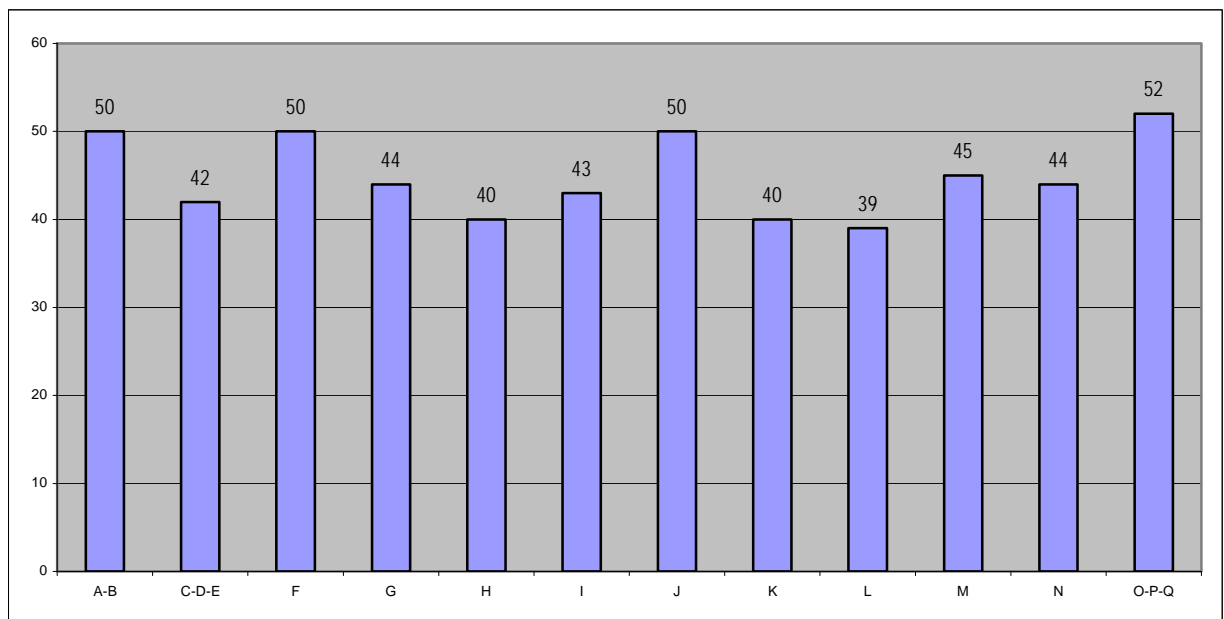
Table 6: Complaints to upper extremities due to physical workload between 1997 and 2002, by sector

Complaints to the upper extremities due to physical workload (% regularly/sometimes, in the past 12 months)	1997	1998	1999	2000	2001	2002
A-B	49	34	40	53	40	50
C-D-E	44	40	43	48	43	42

Complaints to the upper extremities due to physical workload (% regularly/sometimes, in the past 12 months)	1997	1998	1999	2000	2001	2002
F	46	41	51	44	45	50
G	39	33	45	43	38	44
H	46	23	38	52	42	40
I	41	33	45	42	44	43
J	31	23	41	38	34	50
K	36	36	40	41	46	40
L	35	30	36	37	40	39
M	43	42	44	43	43	45
N	45	40	46	53	51	44
O-P-Q	49	39	48	43	49	52

Source: CBS, Statline 2006

Figure 14: Complaints to the upper extremities due to physical workload (% regularly / sometimes, in the past 12 months), by sector, 2002



Source: CBS, Statline 2006

Complaints to the upper extremities due to hand, arm and body vibrations from vehicles or equipment are most often reported by those employed in transport, storage and communication (I) and less often by workers in the trade sector (G) (see table 7). Over the years the percentages have fluctuated for all sectors without any clear trend.

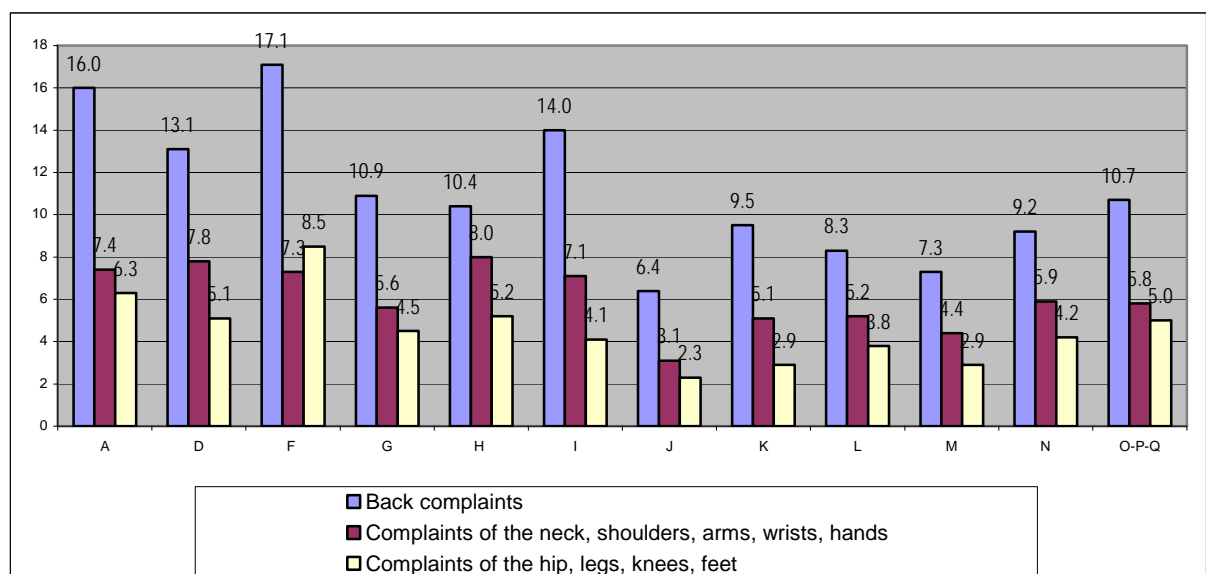
Table 7: Complaints to the upper extremities due to hand, arm, and body vibrations from vehicles or equipment (% regularly/sometimes, in the past 12 months) by sector, 1997- 2002

	1997	1998	1999	2000	2001	2002
A-B	20	12	14	17	16	16
C-D-E	18	13	19	21	16	21
F	15	17	19	17	17	18
G	9	10	16	12	11	10
H	.	.	.	.	.	.
I	31	28	32	30	30	29
J	.	.	.	.	.	.
K	.	.	.	.	.	.
L	.	23	.	-	.	.
M	.	.	.	.	.	.
N	.	.	.	.	.	.
O-P-Q	.	.	.	.	.	.

Source: CBS, Statline 2006

In construction (F) and agriculture (A) the percentage of employees reporting back complaints and complaints to lower extremities as the causes of their last leave of absence is highest. Complaints to the upper extremities are most often reported by workers in hotels and restaurants (H) and manufacturing industry (D). Workers in construction (F) and transport and communication (I) most often mention that the causes of their last absence period were mainly or partly work related: 35.1% and 32.4%, respectively. This share is the lowest in financial intermediation (J): 16.8% (NEA, 2005).

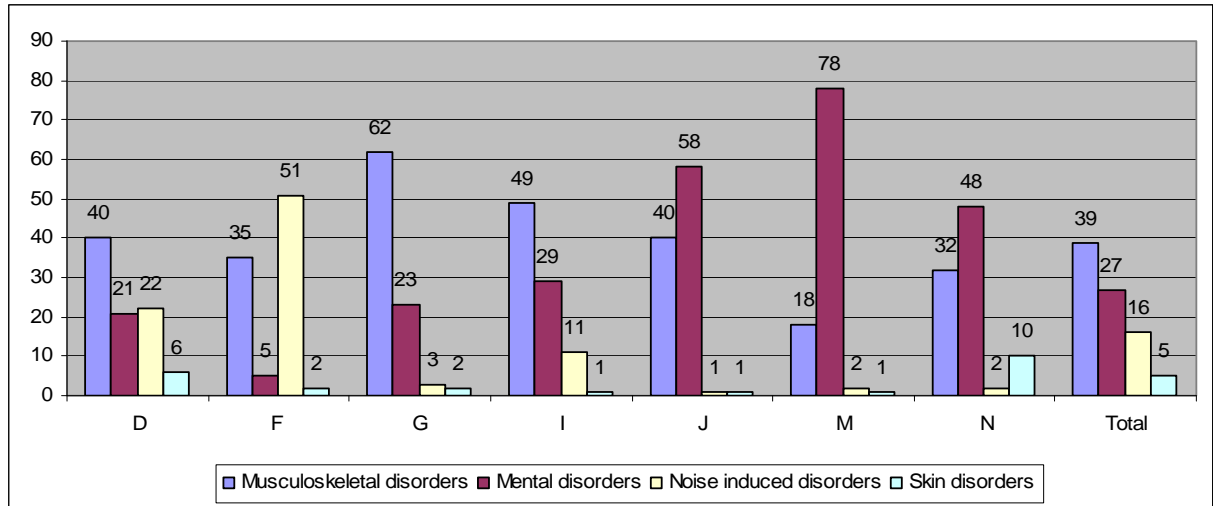
Figure 15: Type of complaints - mentioned by employees- that caused last leave of absence, by sector, 2005



Source: NEA 2005

When focusing on the type of occupational diseases by sector, it can be seen that 62% of all occupational diseases in repair and trade (G) were MSDs in 2005, while in transport (I) the corresponding share was 49%. MSDs were also the most frequent occupational disease in manufacturing industry (D): 40% of the total.

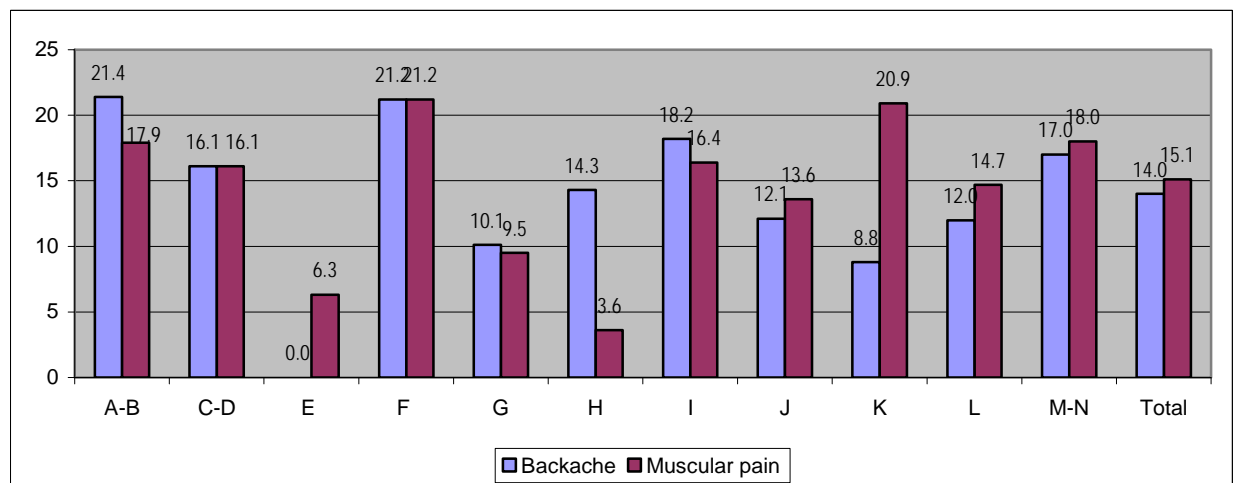
Figure 16: Type of occupational disease (in % over total workers), by sector, 2005



Source: Netherlands Center for Occupational Diseases (Nederlands Centrum voor Beroepsziekten; NCvB)

Evidence from the ESWC suggests that the highest prevalence of MSDs is found among workers in agriculture and fisheries (A-B), construction (F), education and health (M-N), transport and communication (I) and manufacturing industry (C-D). It is also worth stressing the 20.9% share of workers in real estate (K) who suffer from muscular pain and the 14.3% of workers in hotels and restaurants (H) who complain of backache.

Figure 17: Percentage share of workers reporting MSDs: backache and muscular pain, by sector, 2005



European Survey on Working Conditions, 2005

5. By occupation

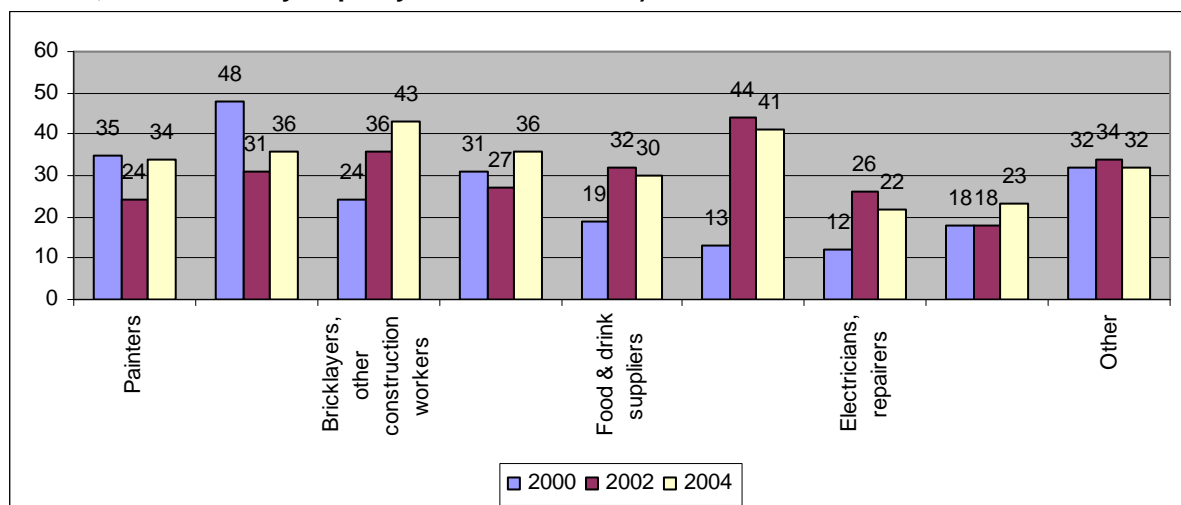
ISCO Groups of occupation used in tables and figures:

- ISCO 1: Legislators, senior officials and managers;
- ISCO 2: Professionals;
- ISCO 3: Technicians and associate professionals;
- ISCO 4: Clerks;
- ISCO 5: Service workers and shop and market sales workers;
- ISCO 6: Skilled agricultural and fishery workers;
- ISCO 7: Craft and related trades workers;
- ISCO 8: Plant and machine operators and assemblers;
- ISCO 9: Elementary occupations;
- ISCO 10: Armed forces.

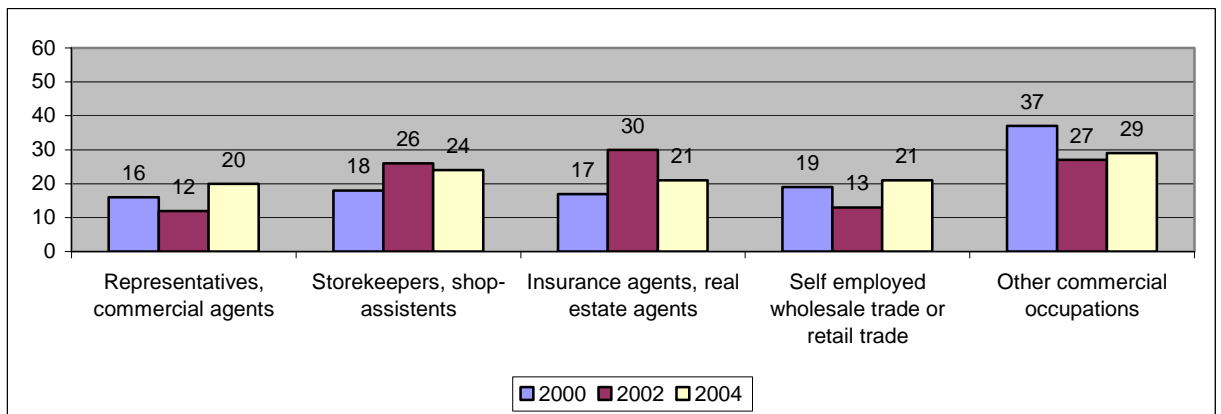
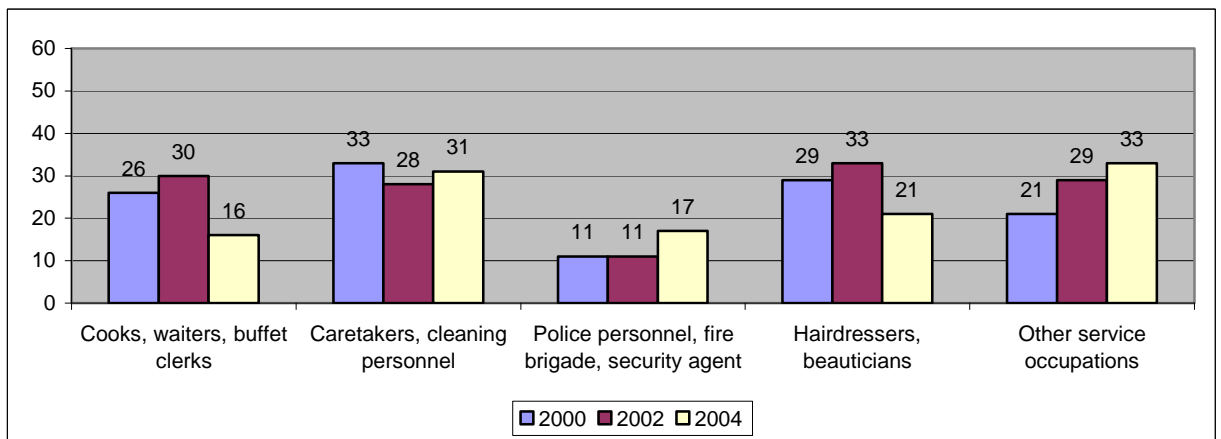
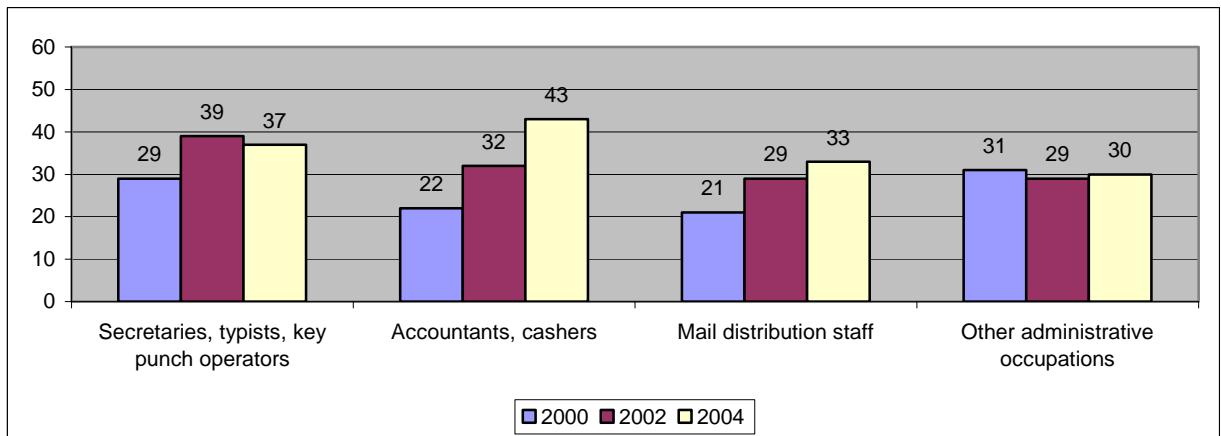
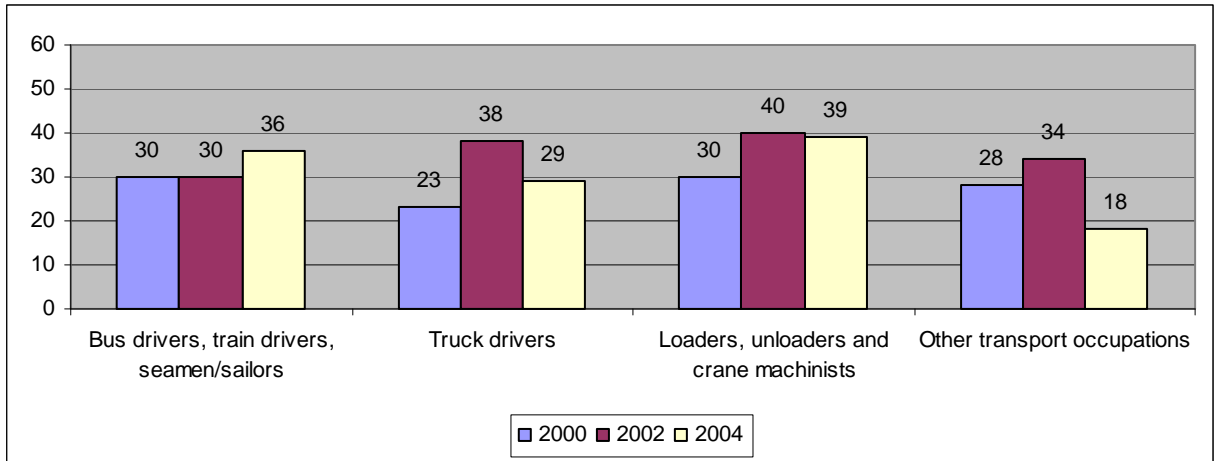
In 2004 the occupations reporting most RSI complaints were administrative, workmanship/industrial, and transport occupations. Most RSI complaints are reported by artists (50%), bricklayers and other construction workers (43%), accountants, cashiers (43%) and tailors, upholsterers, and the like (41%).

Between 2000 and 2002 RSI complaints have increased significantly among bricklayers and other construction workers, foods and drink suppliers, tailors/upholsterers/and the like, truck drivers, and storekeepers and shop-assistants. In the same period RSI complaints decreased among nurses and (ward) orderlies. Between 2002 and 2004 there was a significant decrease in RSI complaints among other transport occupations, storekeepers and shop-assistants, cooks/waiters/buffet clerks and teachers in higher education.

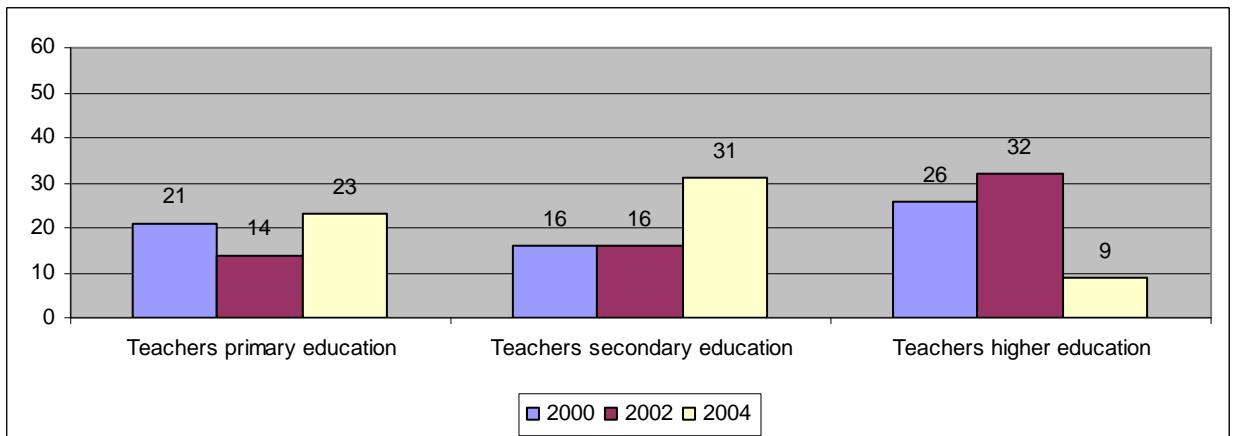
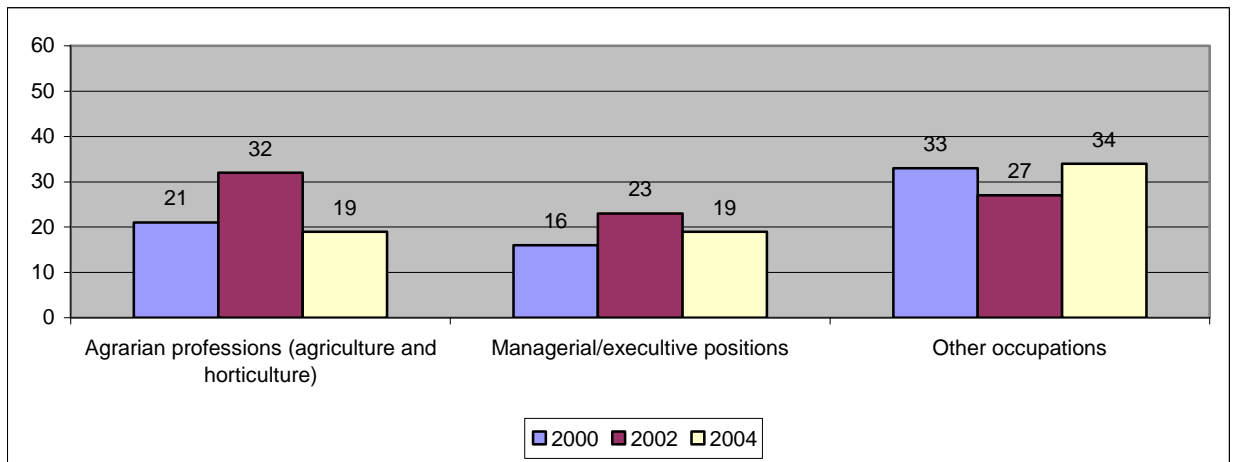
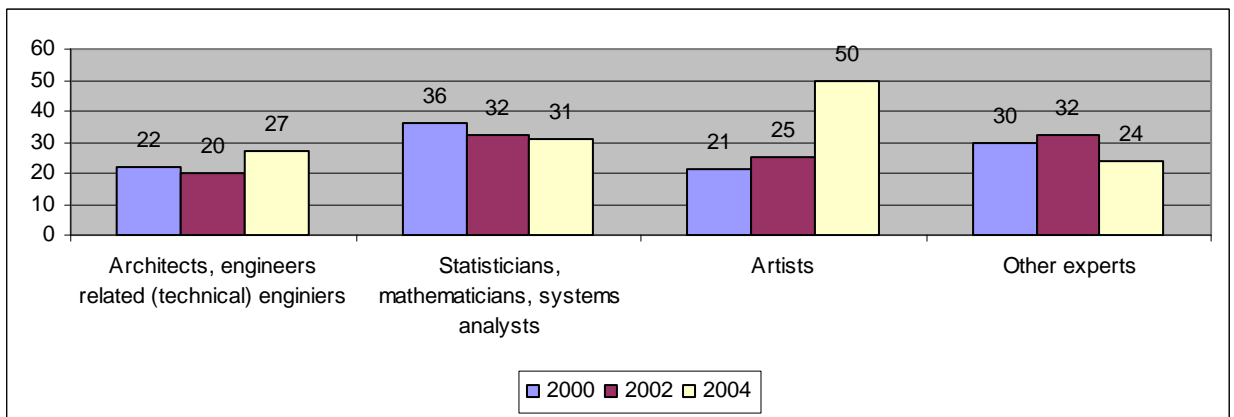
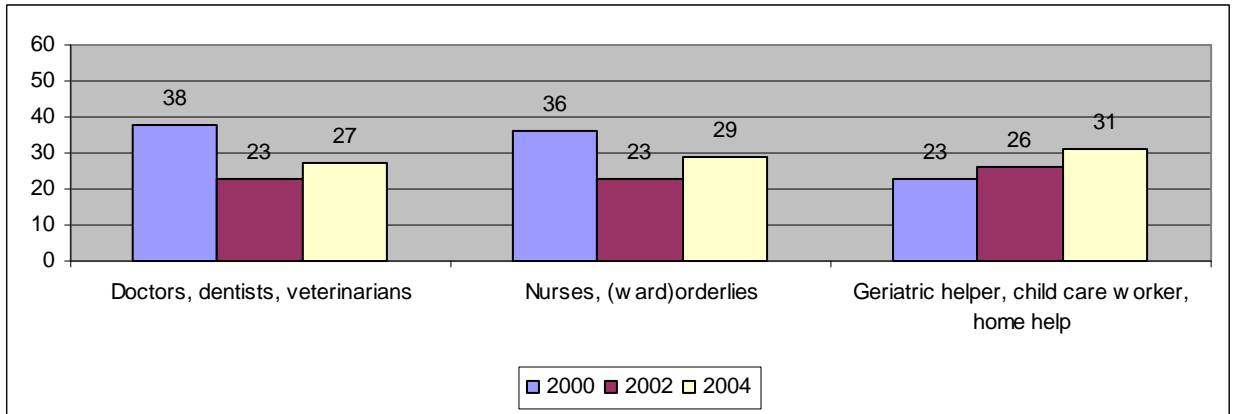
Figure 18: RSI in the Dutch working population by occupation, 2000, 2002, 2004 (% regularly or long-lasting pain/discomfort to neck, shoulders, arms/elbows, or wrists/hands in the past 12 months, which are fully or partly the result of work)



Work-related musculoskeletal disorders - Facts and figures - The Netherlands



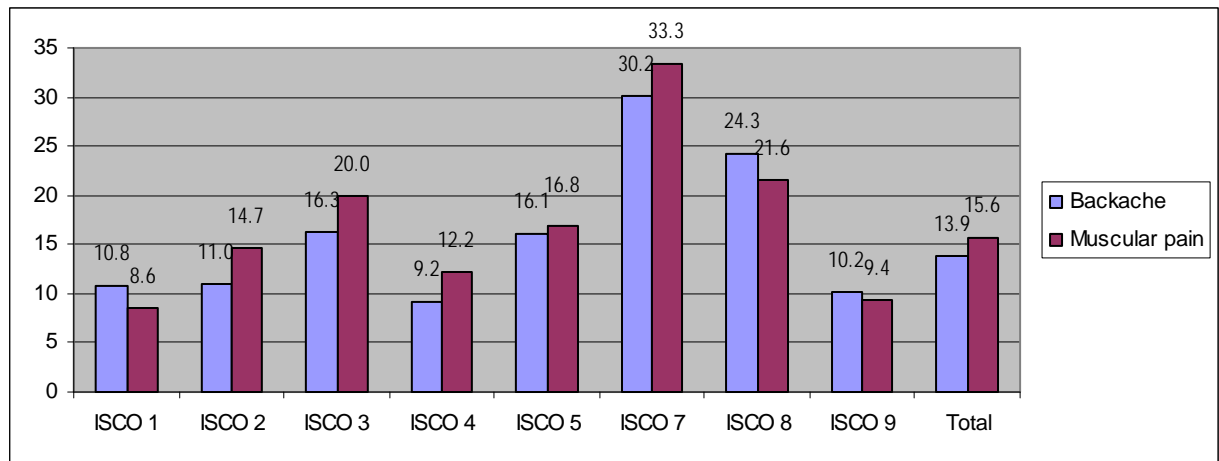
Work-related musculoskeletal disorders - Facts and figures - The Netherlands



Source: Heinrich et al., 2006

According to the ESWC, the highest prevalence of MSDs in the Dutch working population is found among craft and related trades workers (ISCO 7), plant and machine operators and assemblers (ISCO 8), technicians and associate professionals (ISCO 3) and service workers and shop and market sales workers (ISCO 5). Most occupations report a higher prevalence of muscular pain than backache except plant and machine operators and assemblers (ISCO 8), legislators, senior officials and managers (ISCO 1) and elementary occupations (ISCO 9), where the opposite is true.

Figure 19: Percentage share of workers reporting MSDs: backache and muscular pain, by occupation, 2005

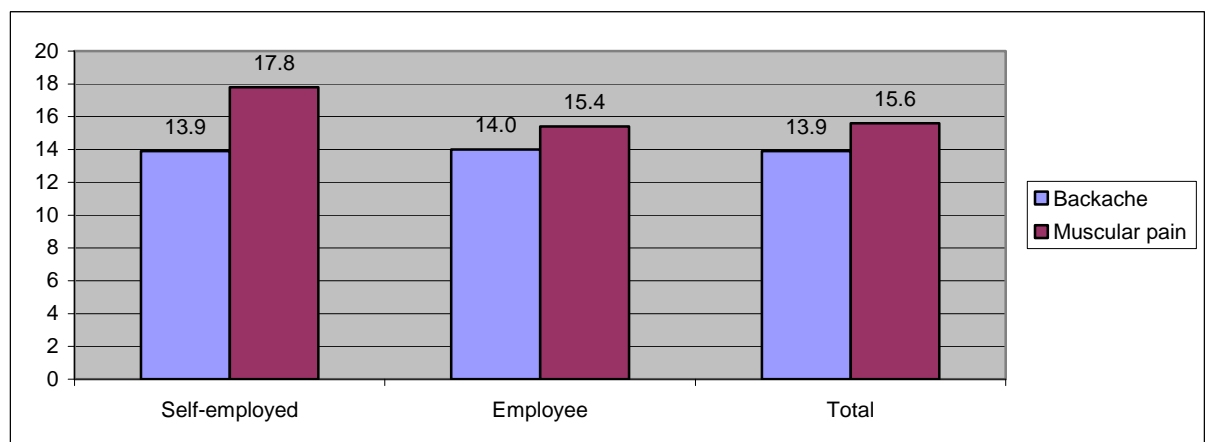


European Survey on Working Conditions, 2005

6. By employment status

The ESWC reveals that the Dutch self-employed report a slightly higher prevalence of muscular pain than Dutch employees: 17.8% and 15.4%, respectively. The shares of backache are basically the same in both groups, roughly 14%.

Figure 20: Percentage share of workers reporting MSDs: backache and muscular pain, by employment status, 2005



European Survey on Working Conditions, 2005